P 93/3

United States
Environmental Protection
Agency

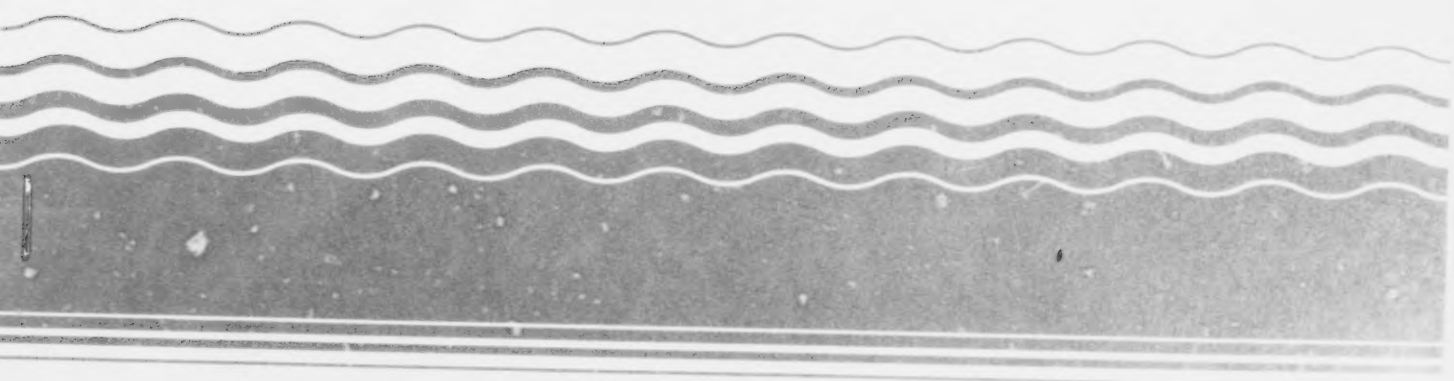
Office of Emergency and
Remedial Response
Washington DC 20460

EPA/540/G-89/002
OSWER Directive 9320.2-3A
April 1989

Superfund

EPA

Procedures for Completion and Deletion of National Priorities List Sites



EP1.2:

EPA/540/G-89/002
OSWER Directive 9320.2-3A
April 1989

Procedures for Completion and Deletion of National Priorities List Sites

U.S. Environmental Protection Agency
Office of Emergency and Remedial Response
401 M Street, SW
Washington, D.C. 20460

NOTICE

This document has been reviewed in accordance with U.S. Environmental Protection Agency policy and approved for publication. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

TABLE OF CONTENTS

Section		Page
1.0	INTRODUCTION	1
2.0	SITE COMPLETION	2
3.0	THE CLOSE OUT REPORT	6
4.0	NPL DELETION CRITERIA	9
5.0	THE DELETION PROCESS	10

Appendix A. Completion Process Diagrams

Appendix B. Sample Close Out Report

Appendix C. Sample Notice of Intent to Delete

Appendix D. Sample Local Notice of Intent to Delete

Appendix E. Sample Notice of Deletion

LIST OF EXHIBITS

Exhibit		Page
1.	Close Out Report Review and Approval Process	4
2.	Contributions of Superfund Cleanup Activities to the Close Out Report	8
3.	The Deletion Process	11

1.0 INTRODUCTION

Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), requires the Environmental Protection Agency (EPA) to maintain a National Priorities List (NPL) of hazardous waste sites with known or threatened releases. The NPL identifies abandoned or uncontrolled hazardous waste sites that warrant further investigation to determine if they pose a threat to human health or the environment. Only sites on the NPL are eligible for Superfund-financed remedial action under CERCLA (removal and enforcement actions may be taken at sites that are not on the NPL). The EPA may delete a site from the NPL if it determines that no further response is required to protect human health and the environment.

This document focuses on the technical requirements that have been developed to determine completion of Superfund sites and the subsequent procedural requirements for deleting sites from the NPL. Completion requirements were developed to provide a definable endpoint to Superfund cleanup activities as well as satisfy the requirements for deletion. This guidance does not apply to proposed sites that do not get placed on the final NPL. Such sites will be handled as part of the rulemaking process for placing sites on the NPL.

Following implementation of all appropriate remedial actions, a site will be classified as either a completion or a long-term response action (LTRA). Both completions and LTRAs require that all activities identified in the Record of Decision (ROD) (or Action Memorandum for removal sites) be implemented. Remedies must be performing according to design specifications and all pathways of exposure must be addressed.

LTRAs are actions that require a continuous period of on-site activity before cleanup levels specified in the ROD or Action Memorandum are achieved. Site completion occurs at the point where cleanup levels are achieved for all pathways of exposure and no further Superfund response is required to protect human health or the environment. Protectiveness can be provided through treatment, containment or removal of waste, provision of an alternate water supply, or use of institutional controls. The activities required to achieve protectiveness for a site will be determined in the ROD. It is not necessary that all waste be treated or removed, as long as protectiveness is achieved. In cases where waste has been left on site, the five year review procedures established in Section 121(c) of CERCLA as amended by SARA will continue to be appropriate regardless of the completion

or deletion status of the site. Following site completion, it may still be necessary to perform some Operation and Maintenance (O&M) activities to maintain the integrity of the remedy. O&M must be performed by either the State or Responsible Parties (RPs).

EPA Regions are responsible for identifying sites as completions or LTRAs. EPA Headquarters and States will be given the opportunity to comment on completion decisions through review of the Superfund Site Close Out Report described in this document.

This document is intended for use by the EPA, States and RPs in the completion and deletion of NPL sites. The roles and responsibilities of all parties are described.

2.0 SITE COMPLETION

Completion of a Superfund site will occur when the following requirements are satisfied:

1) Cleanup levels specified in the ROD have been achieved and all cleanup actions identified in the ROD have been successfully implemented;

2) The site is protective of human health and the environment across all pathways of exposure;

3) The constructed remedy is operational and functional and performing according to engineering design specifications; and

4) The only activities remaining at the site are O&M activities to be provided or performed by the State or RP.

In order to demonstrate the satisfaction of these requirements, a Superfund Site Close Out Report will be prepared for every NPL site. The format and contents of this report are discussed in Section 3.0. Site completion may occur following any of a number of activities including a final operable unit remedial action, a no-action ROD, a removal action where the removal was sufficient to meet completion requirements, or an LTRA. The Close Out Report will be prepared following conclusion of all Superfund cleanup activities.

For Federal-Lead and RP-lead sites, the Close Out Report will be prepared by the Region and approved by the Regional Administrator (RA). The State and EPA Headquarters will be given the opportunity to review and comment on the report prior to RA approval. For State-lead sites, the State may elect to prepare

the Close Out Report, however, EPA regional and headquarters review and final approval by the RA will still be required. Approval of the Close Out Report by the RA will signify Superfund site completion in accordance with the requirements specified above. Approval of the Close Out Report will also signify that the site has entered O&M. All O&M activities must be provided or performed by the State or RP. The process for reviewing a Close Out Report is illustrated in Exhibit 1.

Preparation of a Close Out Report will be appropriate for all NPL sites. The following paragraphs describe the relationship of the Close Out Report to each of the possible completion scenarios and LTRAs:

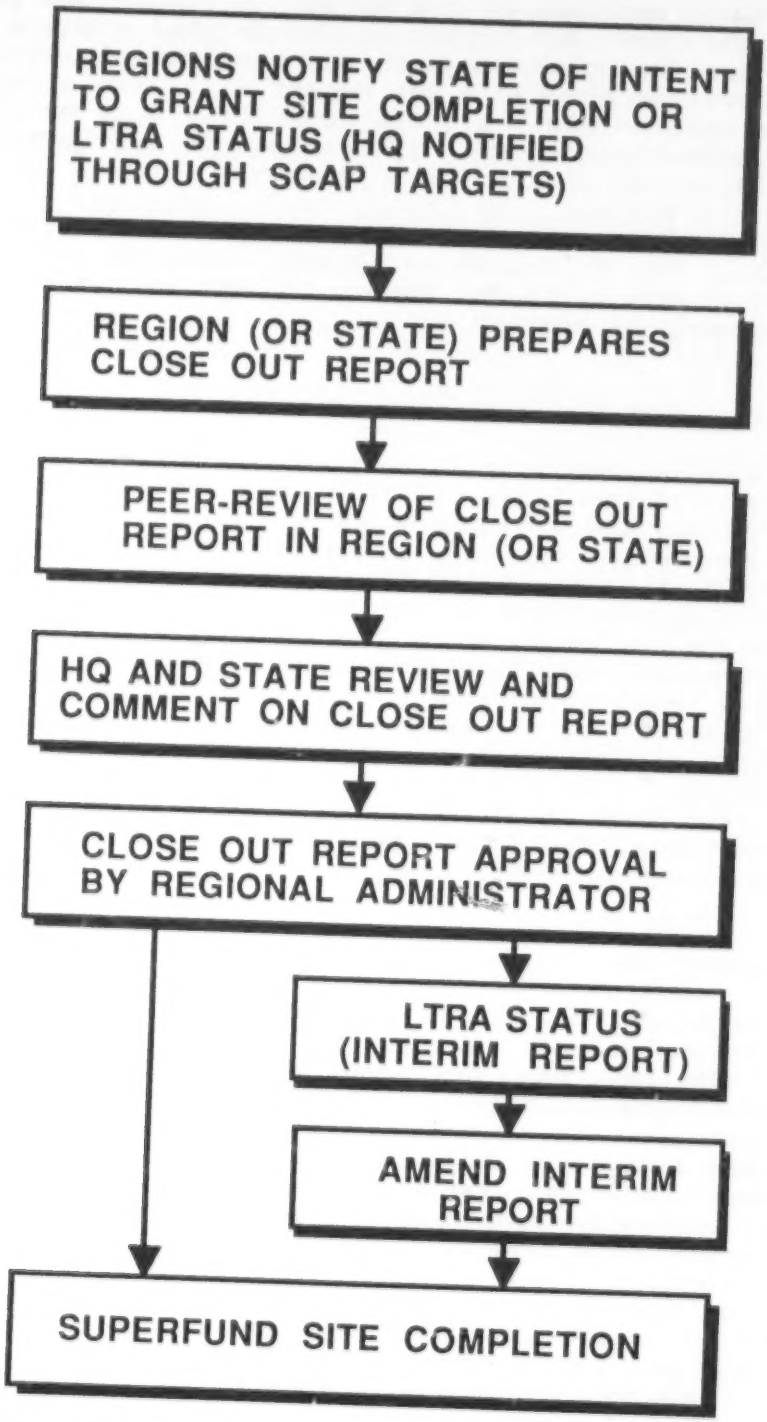
Final Operable Unit Remedial Actions

The Close Out Report will be prepared following successful implementation of the final operable unit remedial action at the site. All confirmatory sampling and any activities required to ensure the remedy is operational and functional should be completed prior to approval of the Close Out Report. A Remedial Action Report as described in the Superfund Remedial Design and Remedial Action Guidance (OSWER Directive 9355.0-4A) will be prepared by the construction management contractor following each operable unit remedial action. This report constitutes the contractor's assurance to the EPA that the work was performed to within desired specifications. It does not, however, constitute site completion. Only the Close Out Report will satisfy completion requirements and only one Close Out Report will be prepared for the entire site, regardless of the number of operable units.

No Action Sites

This category includes sites where first operable unit remedial actions, expedited response actions, or emergency removal actions have been performed and the final operable unit ROD determines no additional cleanup activities are required to achieve protectiveness of human health and the environment. It also includes sites with RODs requiring only monitoring or institutional controls. The Close Out Report will provide final consolidation of the results of all site activities and ensure that all issues regarding site completion have been addressed (e.g., O&M assurances and institutional controls). Many of the components of the Close Out Report may be addressed in the ROD as part of the justification for no cleanup action. The Region may reference any pertinent information contained in the ROD to satisfy the requirements for site completion.

Exhibit 1. Close Out Report Review and Approval Process


REGIONS NOTIFY STATE OF INTENT TO GRANT SITE COMPLETION OR LTRA STATUS (HQ NOTIFIED THROUGH SCAP TARGETS)
REGION (OR STATE) PREPARES CLOSE OUT REPORT
PEER-REVIEW OF CLOSE OUT REPORT IN REGION (OR STATE)
HQ AND STATE REVIEW AND COMMENT ON CLOSE OUT REPORT
CLOSE OUT REPORT APPROVAL BY REGIONAL ADMINISTRATOR
LTRA STATUS (INTERIM REPORT)
AMEND INTERIM REPORT
SUPERFUND SITE COMPLETION

It is anticipated that very few NPL sites will require no cleanup actions whatsoever. In these cases, thorough documentation of all site information will be especially important and a Close Out Report will continue to be appropriate. The Close Out Report will be abbreviated as components pertaining to cleanup activities will not be relevant.

Removal Sites

Some sites will use removal actions to perform a complete cleanup and, therefore, will not have a ROD. A Close Out Report will be required for these removal sites. The engineering evaluation and cost analysis (EE/CA) and Action Memorandum process used in performing removal actions is less exhaustive than the RI/FS and ROD prepared for remedial sites. As such, the Close Out Report will take on added significance to provide adequate documentation that the activities performed at the site are sufficient to meet the completion requirements.

In each of the cases presented above, the activities performed to bring the site to completion will vary. Appendix A presents the most likely completion process for each of the scenarios.

LTRA Sites

An Interim Close Out Report, prepared by the Region and approved by the RA, will be required of all LTRA sites. The Interim Report will contain final information for all completed operable units at the site and describe the LTRA activities to be performed and the cleanup levels to be achieved for the LTRA portion of the site. The Interim Report will act as the determining factor for designating sites as LTRAs on the NPL and for internal Superfund tracking. Once the LTRA operable unit is operating as designed, States are expected to assume responsibility for operation of the LTRA. The Interim Report will be amended when cleanup levels are achieved to include final information for the LTRA operable units of the site in order to satisfy completion requirements. The Interim Report and the amendment together will constitute the final Close Out Report for the site.

3.0 THE CLOSE OUT REPORT

The Close Out Report provides a brief technical demonstration of how the implemented remedy at the site satisfies the completion requirements. The exact format and contents of the Close Out Report will vary depending upon the specific site. The Region should use its discretion in determining the level of detail necessary in the report to demonstrate the completion of activities at the site. The Report should be prepared by the Regional Project Manager (or appropriate State personnel) and should generally not exceed 10 to 15 pages in length (for very large sites with multiple operable units, the report may be longer). The information used in compiling the report should be readily available from previous documentation of site activities. The following components should be addressed as appropriate:

1) Summary of Site Conditions

- Site background
- RI/FS results
- ROD findings
- Design criteria
- Cleanup activities performed
- Community relations activities performed

2) Demonstration of QA/QC from Cleanup Activities

- QA/QC protocol followed
- Sampling and analysis protocol followed
- Results of on-site inspections
- Equipment Acceptance

3) Monitoring Results

- Sufficient data must be available to demonstrate that the cleanup levels specified in the ROD or Action Memorandum have been achieved and that implemented remedies are performing at design specifications.

- For no action sites, results of any monitoring specified in the ROD must be presented to satisfy completion requirements.

- This section will be contained in the amendment to the Interim Close Out Report for any LTRA operable units.

4) Summary of Operation and Maintenance

- Assurance that O&M plans are in place and are sufficient to maintain the protectiveness of the remedy.

- Assurance that all necessary institutional controls (e.g. deed restrictions) are in place.

- Assurance that O&M activities specified for the site will be provided or performed by the State or RP.

- This section will be contained in the amendment to the Interim Close Out Report for any LTRA operable units.

5) Protectiveness

- Assurance that the implemented remedy (or no action decision) achieves the degree of cleanup or protection specified in the ROD(s) for all pathways of exposure and that no further Superfund response is appropriate in order to provide protection of human health and the environment.

- Assurance that all areas of concern described in the NPL listing have been adequately addressed.

- This section will be contained in the amendment to the Interim Close Out Report for any LTRA operable units.

6) Bibliography

- Complete citations of all referenced documents and any other documents relevant to completion of the site should be included.

Many of these sections, particularly QA/QC and monitoring results, will embody a great deal of information. The Close Out Report should only summarize this information to the degree necessary to inform the reader of the activities performed and the results achieved. Detailed technical information and data should be referenced to keep the report brief. The Close Out Report should clearly identify any issues that might be of continued concern to the Agency or the involved community and explain why these issues do not preclude the site from completion. An Example of a completed Close Out Report is presented in Appendix B.

The Close Out Report provides the only overall technical justification for site completion. As such, it must clearly demonstrate how the activities performed at the site have been sufficient to satisfy the completion requirements. Each activity performed in the cleanup process will have a specific impact on site completion. Exhibit 2 illustrates the contributions of each of these steps to the contents of the Close Out Report.

Exhibit 2. Contributions of Superfund Cleanup Activities to the Close Out Report

CLEANUP ACTIVITY	CONTRIBUTION TO CLOSE OUT REPORT
HRS ACTIVITY PA/SI	• NPL Listing Criteria • Pathways of Exposure
RI/FS, EE/CA RISK ASSESSMENT	• Site Characteristics • Site Hazards • Types, volumes of waste
RECORD OF DECISION ACTION MEMORANDUM	• Cleanup goals • Protectiveness required • State and RP responsibilities • Community Relations activities • Compliance with CERCLA • Institutional control requirements
REMEDIAL DESIGN	• Performance criteria • QA/QC requirements • O&M Plan • Performance criteria • Compliance with intent of ROD
REMEDIAL ACTION REMOVAL ACTION EXPEDITED RESPONSE	• Activities performed • Construction inspection results • QA/QC results • Confirmatory sampling results • Compliance with design specifications

The design of the remedial action will be of particular importance in determining completion of site activities. The design should develop specific performance criteria and detail specific methods and measures to be used to determine the effectiveness of the implemented remedy and compliance with the design criteria and ROD objectives. The design should also detail QA/QC requirements during construction and necessary O&M and institutional controls pertinent to effective operation of the remedy. Care should be taken during construction and monitoring activities to document the compliance with design criteria.

Regions should notify EPA Headquarters and the State of their intent to assign completion or LTRA status to sites prior to the approval of the Close Out Report. The report should receive peer-review in the Region and then be transmitted to EPA Headquarters and the State for review and comment. The Region must receive these comments prior to approval of the report by the Regional Administrator. Each region has a technical staff member within the Hazardous Site Control Division of the Office of Emergency and Remedial Response who will act as the primary reviewer of the Close Out Report. These individuals will work closely with the Region in performing completion activities and will provide prompt review of the Close Out Report. A copy of the approved Close Out Report should be sent to EPA Headquarters following RA signature.

In addition to the Close Out Report, the Region should prepare a one page fact sheet summarizing the pertinent facts of site completion to be used for public information and press release purposes. A copy of this fact sheet should be forwarded to Headquarters along with the approved Close Out Report.

The Close Out Report does not constitute the completion of cooperative agreements, consent decrees, or administrative orders, nor does it signify the resolution of all contractual or other administrative issues for Superfund activities.

4.0 NPL DELETION CRITERIA

The National Oil and Hazardous Substances Contingency Plan (NCP), Section 300.66(c)(7) states that sites may be deleted from or recategorized on the NPL where no further response is appropriate. In making this determination, EPA will consider whether any of the following criteria has been met:

(i) EPA, in consultation with the State, has determined that responsible or other parties have implemented all appropriate response actions required;

(ii) All appropriate Fund-financed response under CERCLA has been implemented, and EPA, in consultation with the State, has determined that no further cleanup by responsible parties is appropriate; or

(iii) Based on a remedial investigation, EPA, in consultation with the State, has determined that the release poses no significant threat to public health and the environment and, therefore, taking of remedial measures is not appropriate.

Deletion of a site from the NPL does not preclude eligibility for subsequent Fund-financed or RP actions. Section 300.66(c)(8) of the NCP states that Fund-financed response actions may be taken at sites that have been deleted from the NPL if future conditions warrant such actions without returning the site to the NPL. If it is determined that the site should be returned to the NPL due to a threat to human health or the environment, it may be reinstated without rescoring on the Hazard Ranking System (HRS). Future enforcement actions may also be taken depending on liability releases contained in the consent decree or administrative order. Deletion of a site also does not affect cost recovery efforts under CERCLA Section 107.

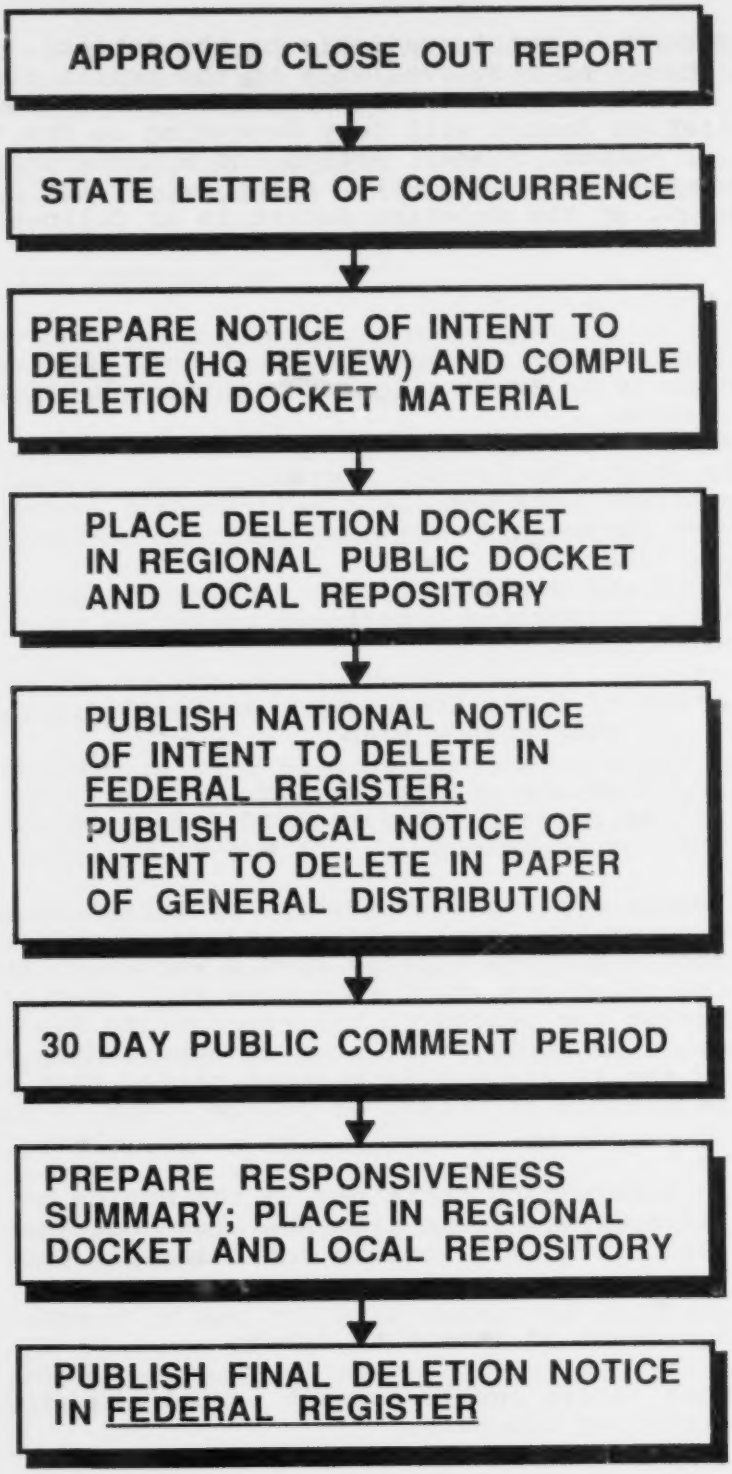
5.0 THE DELETION PROCESS

The deletion process may begin upon approval of the Close Out Report by the RA. No site may be deleted from the NPL without an approved Close Out Report. In some cases, the State may initiate this process by specifically requesting the deletion of a site.

The deletion process is divided into three steps as follows: 1) initiation of the process in which the Region obtains a letter of concurrence from the State, compiles the deletion docket, and prepares the Notice of Intent to Delete for Headquarters review and RA approval; 2) Regional publication of the Notice of Intent to Delete and the local notice, and 30-day public comment period; and 3) Regional preparation of the responsiveness summary and publication of the Notice of Deletion. Exhibit 3 illustrates the steps in the deletion process.

The Region will initiate the deletion process by consulting with the State and requesting their concurrence on the Agency's intent to delete a site. No site may be deleted from the NPL without state concurrence. Regions will prepare a deletion docket containing all pertinent information supporting the Region's deletion recommendation. The deletion docket is not a continuation of the administrative record for the site; however, documents that are contained in the administrative record can be referenced and do not have to be duplicated in the deletion docket (provided the

Exhibit 3. The Deletion Process


APPROVED CLOSE OUT REPORT
STATE LETTER OF CONCURRENCE
PREPARE NOTICE OF INTENT TO DELETE (HQ REVIEW) AND COMPILE DELETION DOCKET MATERIAL
PLACE DELETION DOCKET IN REGIONAL PUBLIC DOCKET AND LOCAL REPOSITORY
PUBLISH NATIONAL NOTICE OF INTENT TO DELETE IN FEDERAL REGISTER; PUBLISH LOCAL NOTICE OF INTENT TO DELETE IN PAPER OF GENERAL DISTRIBUTION
30 DAY PUBLIC COMMENT PERIOD
PREPARE RESPONSIVENESS SUMMARY; PLACE IN REGIONAL DOCKET AND LOCAL REPOSITORY
PUBLISH FINAL DELETION NOTICE IN FEDERAL REGISTER

administrative record is still available to the public). The deletion docket should be made available to the public at the Regional public docket and a local repository. The documents to be placed in the deletion docket will vary depending on the type of response (remedial action, removal action, no action) and the lead organization (Federal, State, or RP). A suggested list of documents to include in the deletion docket is as follows:

- RI Report
- FS Report
- ROD (or equivalent) for each operable unit (including any ROD amendments or Explanation of Significant Differences)
- Consent Decree
- Action Memorandum
- Community Relations Plans
- Superfund State Contract
- Cooperative Agreements
- Agreements with RPs
- Design Plans and Specifications
- Construction Inspection Reports
- Construction Final Report
- OSC Report
- Documentation of State Concurrence on Deletion
- Operation and Maintenance Plan
- Close Out Report
- Transcripts from any public meetings
- Responsiveness Summary for Notice of Intent to Delete
- Bibliography of Documents.

Before the Region publishes the Notice of Intent to Delete in the Federal Register or the local notice, the deletion docket must be complete. Regional program offices should work with their Superfund community relations staff to ensure that complete copies of the deletion docket are placed in the appropriate Regional and local repositories. The public will have an opportunity to review this docket during the 30 day public comment period that follows publication of the Notices of Intent to Delete. Public meetings are optional.

Site-specific information contained in the Notice of Intent to Delete should be largely available from the Close Out Report. The Notice of Intent to Delete will contain the following Sections:

SUMMARY: Announcement of intent to delete.

DATES: Announces 30 day public comment period and provides dates for submittal of comments.

ADDRESSES: Name, address, and phone number of a Regional contact where comments may be sent and location of the Regional Docket and local repository.

FOR FURTHER INFORMATION CONTACT: Name, address, and phone number of a Regional contact for further information or questions.

SUPPLEMENTARY INFORMATION:

I. **Introduction:** identification of site(s) to be deleted, and summary of information contained in the Notice of Intent to Delete.

II. **NPL Deletion Criteria:** listing of the NCP criteria and a statement indicating that EPA retains the ability to use Superfund authority at a deleted site if future conditions warrant such actions (Section 300.66(c)(8) of the NCP).

III. **Deletion Procedures:** brief description of the procedures followed to delete sites from the NPL.

IV. **Basis for Intended Site Deletion(s):** includes a brief description of the following items:

- Summary of site history, including location, former use, type of contaminants, date of promulgation on the NPL, and nature of site conditions resulting in inclusion on the NPL
- Description of all response actions taken at the site, including scope of RI if applicable, general results, and conclusions regarding future performance of these actions
- Specification of clean up standards and criteria and results of all confirmatory sampling
- Description of the operation and maintenance procedures and the site monitoring program
- Summary of major Superfund community relations activities
- Summary of how the site meets the deletion criteria
- Acknowledgement of State concurrence to delete the site.

An example of a National Notice of Intent to Delete is presented in Appendix C. The Region should prepare the notice in strict accordance with Federal Register requirements. Headquarters will be available to assist in the preparation and publication of these notices. The Region should allow time for headquarters review of the Notice of Intent to Delete prior to publication in the Federal Register in order to ensure consistency of notices.

The Regional Superfund Community Relations Coordinator should prepare and distribute the local Notice of Intent to Delete. This statement should be published in a local newspaper of general circulation. A press release should also be prepared and distributed to community, State, and local officials, all RPs, appropriate Federal agencies (including the Agency for Toxic Substances and Disease Registry, National Response Team, and the U.S. Coast Guard), Superfund enforcement personnel, the Office of Regional Counsel (ORC), and any local repositories. In addition, the ORC should inform the State Attorney General and other interested agencies (State or Federal Courts and the U.S. Department of Justice) of the intended deletion.

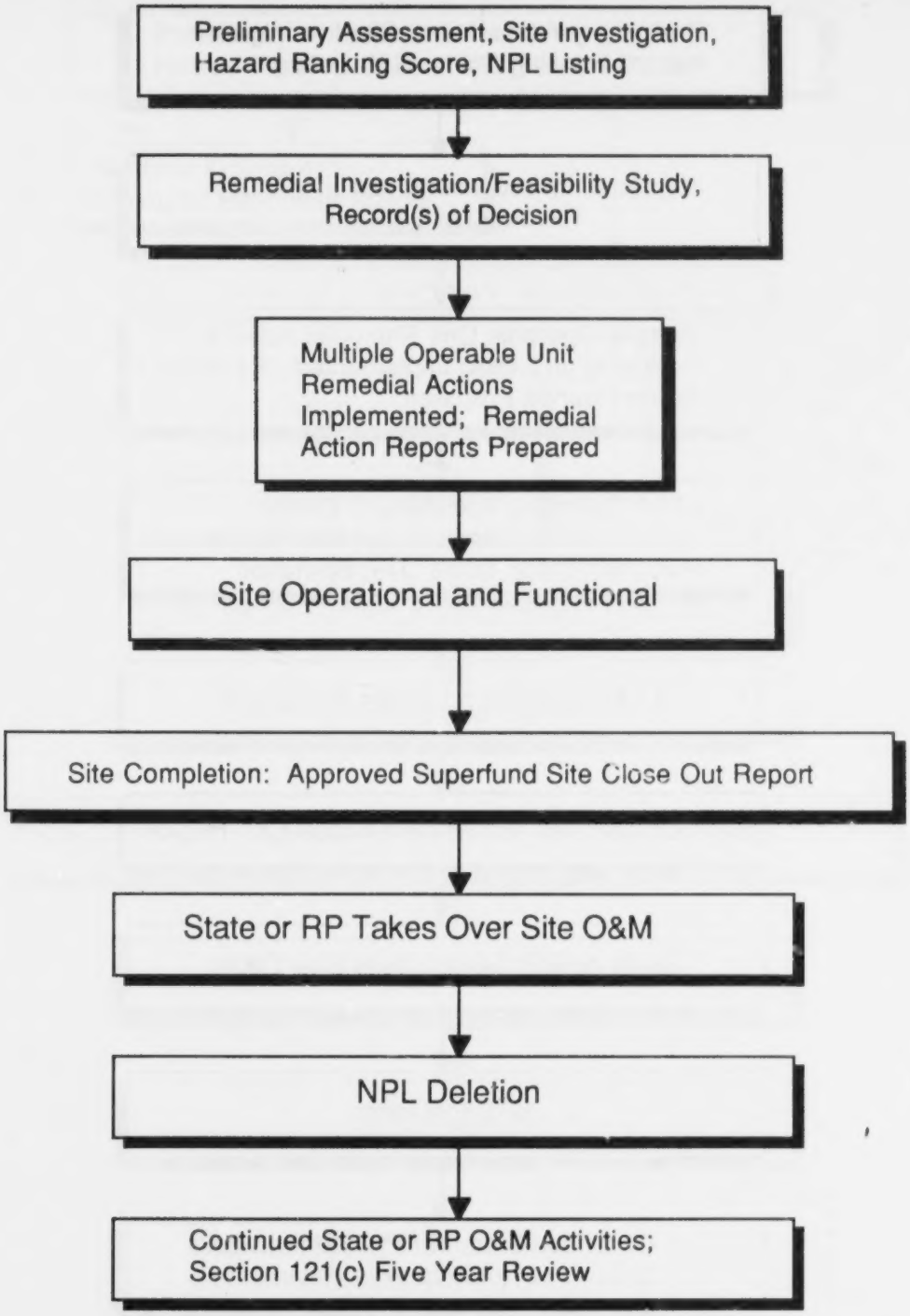
The local notice should announce the Agency's intent to delete the site from the NPL. It should also announce the 30 day public comment period, provide an address and telephone number for submission of comments, and identify the location of the local repository. A sample local notice is provided in Appendix D.

The Region is responsible for preparing a responsiveness summary of local and national comments. The responsiveness summary should provide a summary of all comments received during the public comment period along with detailed responses. Headquarters will assist the Region in preparing responses where appropriate.

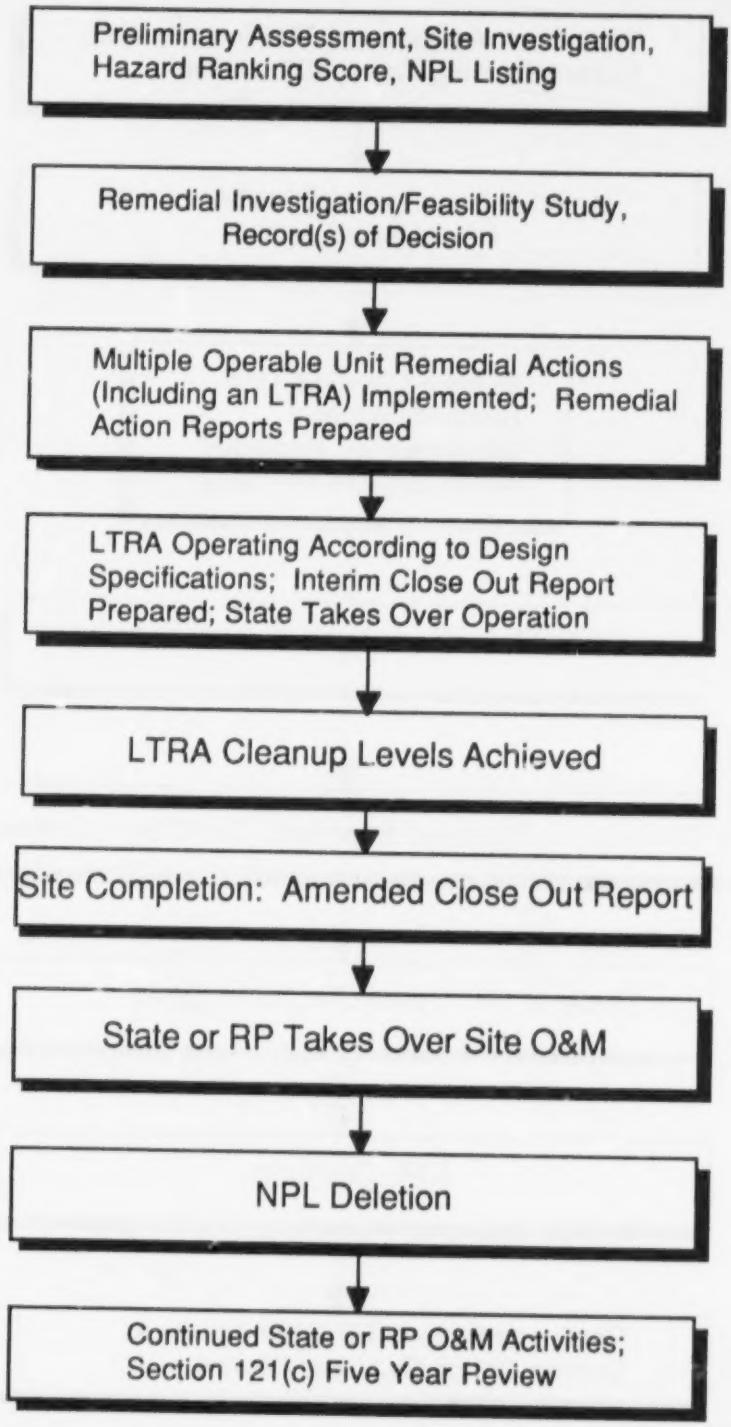
The Region must include a copy of the responsiveness summary, approved by the RA, in the Regional public docket and local repository. The RA will then publish the Notice of Deletion in the Federal Register. Final NPL rulemakings subsequent to the publication of this notice will reflect the deletion. A sample Notice of Deletion is presented in Appendix E.

Appendix A
Completion Process Diagrams

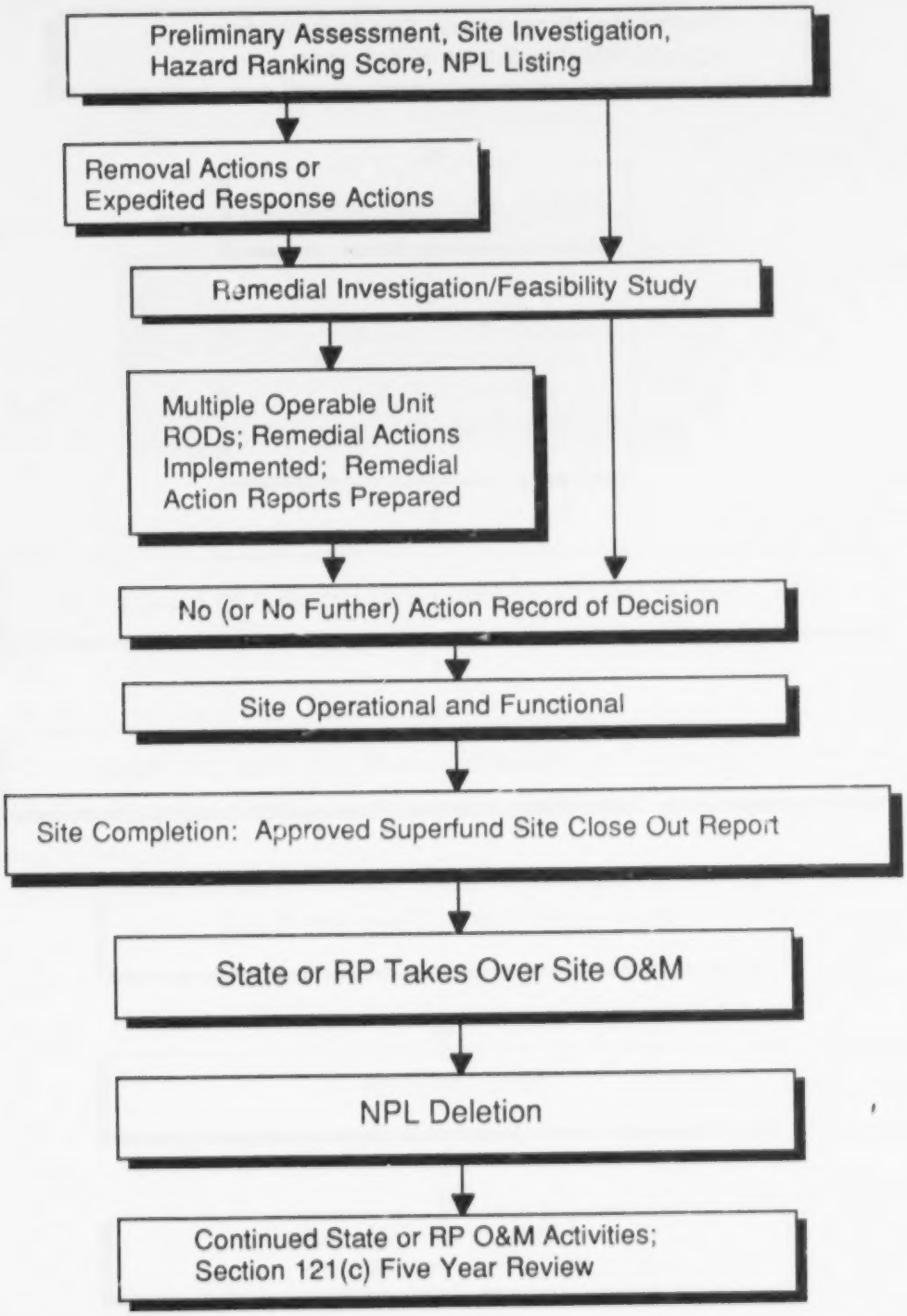
Completion Scenario for Remedial Sites


Preliminary Assessment, Site Investigation, Hazard Ranking Score, NPL Listing
Remedial Investigation/Feasibility Study, Record(s) of Decision
Multiple Operable Unit Remedial Actions Implemented; Remedial Action Reports Prepared
Site Operational and Functional
Site Completion: Approved Superfund Site Close Out Report
State or RP Takes Over Site O&M
NPL Deletion
Continued State or RP O&M Activities; Section 121(c) Five Year Review

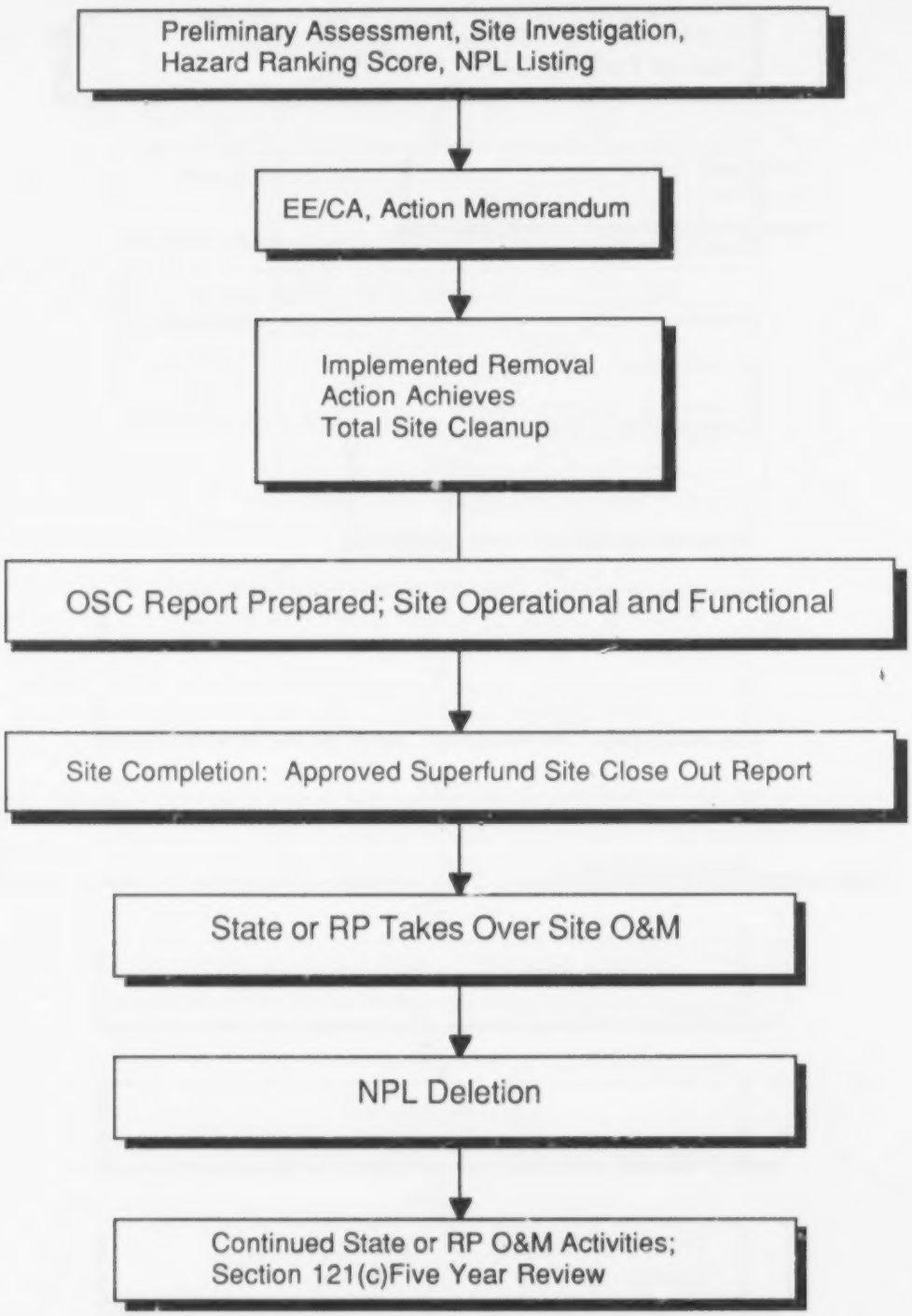
Completion Scenario for LTRA Sites


Preliminary Assessment, Site Investigation, Hazard Ranking Score, NPL Listing
Remedial Investigation/Feasibility Study, Record(s) of Decision
Multiple Operable Unit Remedial Actions (Including an LTRA) Implemented; Remedial Action Reports Prepared
LTRA Operating According to Design Specifications; Interim Close Out Report Prepared; State Takes Over Operation
LTRA Cleanup Levels Achieved
Site Completion: Amended Close Out Report
State or RP Takes Over Site O&M
NPL Deletion
Continued State or RP O&M Activities; Section 121(c) Five Year Review

Completion Scenario for No Action Sites


Preliminary Assessment, Site Investigation, Hazard Ranking Score, NPL Listing
Removal Actions or Expedited Response Actions
Remedial Investigation/Feasibility Study
Multiple Operable Unit RODs; Remedial Actions Implemented; Remedial Action Reports Prepared
No (or No Further) Action Record of Decision
Site Operational and Functional
Site Completion: Approved Superfund Site Close Out Report
State or RP Takes Over Site O&M
NPL Deletion
Continued State or RP O&M Activities; Section 121(c) Five Year Review

Completion Scenario for Removal Sites


Preliminary Assessment, Site Investigation, Hazard Ranking Score, NPL Listing
EE/CA, Action Memorandum
Implemented Removal Action Achieves Total Site Cleanup
OSC Report Prepared; Site Operational and Functional
Site Completion: Approved Superfund Site Close Out Report
State or RP Takes Over Site O&M
NPL Deletion
Continued State or RP O&M Activities; Section 121(c)Five Year Review

Appendix B

Sample Close Out Report

SUPERFUND SITE CLOSE OUT REPORT
Hazwaste Landfill Superfund Site
Wasteville, California

I. SUMMARY OF SITE CONDITIONS

Background

The Hazwaste Landfill is a nine acre site located in Wasteville, California. The site is situated in an industrial part of town, approximately 2000 feet downstream from the confluence of the American and Sacramento Rivers. Approximately 400 feet northwest, and upstream of the site, is the water intake structure which supplies water for up to 145,000 people in Wasteville. Concern for impact on this water supply is the reason that the site was proposed for inclusion on the original National Priorities List (NPL) on December 30, 1982.

The site is the former location of the Waste Products salvage yard. Between 1950 and 1965 the site was used for salvaging of all grades and types of metal, including railroad cars, army tanks, batteries, and possibly some transformers. The total quantities of hazardous or non-hazardous materials handled or disposed of at this site are unknown. The entire site was purchased in 1965 by the State of California as easement for the pending construction of Interstate 5 (I-5). By 1967, I-5 and the realigned Wasteville Street had covered 6.7 acres of the original 9 acre site.

Remedial Planning Activities

Between 1981, when the site first came to the attention of the California Department of Health Services (DHS), and 1985, the 2.3 acres not covered by roadway structures and adjacent areas were sampled seven times. The EPA Remedial Investigation (RI) was performed between June 1983 and June 1984. Lead, copper, and zinc were detected in the top foot of soil throughout the site at levels significantly higher than the state criteria for definition of a hazardous substance. Specifically, the maximum concentrations detected in the 27 surface samples from the 2.3 acre on-site area were 13,600 parts per million (ppm) lead, 3,450 ppm copper, and 19,700 ppm zinc. Polychlorinated biphenyls (PCB's) were also found in the top foot of soil throughout the site, but never at concentrations which exceed the Federal or State definition of a hazardous waste, 50 ppm. Of 48 subsurface samples from the 2.3 acre on-site area, contamination was only detected at four locations at depths ranging from 3 to 10 feet

below ground surface. A complete summary of the results of site analysis can be found in the final RI report.

On February 14, 1985, a draft of the Feasibility Study (FS) was released for a three week public comment period. The FS provided an in depth summary and discussion of site sampling activities, a public health assessment, and an analysis of remedial alternatives. The FS concluded that no action at the site could result in a potential health threat to the public through direct contact with soils contaminated with lead and PCB's. The FS then performed a detailed analysis of capping, excavation and off-site removal, encapsulation, and no action remedial alternatives.

Many comments were received on the report, a majority of which expressed a preference for the removal alternative. A public meeting was held on the FS and a transcript was prepared. All comments were addressed by the EPA in a responsiveness summary released in May, 1985.

On May 9, 1985, consistent with the Initial Remedy Delegation Report of March 8, 1985, the Regional Administrator approved a Record of Decision (ROD) which selected excavation and off-site disposal of all soil contaminated with lead above background levels (200 ppm). This ROD was amended on October 4, 1985. The amendment was developed in consideration of recent guidance which allows clean site closure action levels to exceed background where EPA can demonstrate that the residual contamination would pose no threat to human health or the environment. Based on cleanup objectives at other Federal and state hazardous waste sites, as well as recommendations from the Centers for Disease Control, the 500 ppm lead cleanup level was determined to be fully protective of human health and the environment at this site. It was determined that removal at this level would also eliminate all known exposure to PCB's.

On May 10, 1985, EPA submitted an Interagency Agreement for $72,500 to the U.S. Army Corps of Engineers (USACE) to perform the remedial design. The design was completed on August 28, 1985.

Between July 1985 and March 1986, EPA and the State negotiated a State Superfund Contract (SSC). The SSC was reviewed and revised five times before a final contract was signed on April 1, 1986. The SSC provided that the state pay 10% of the remedial action costs and assume responsibility for all operation and maintenance requirements, as required by CERCLA.

Between September 1985, and March 1986, three open bid periods on the remedial action construction contract were held by USACE. The contract award delay was primarily caused by difficulties in implementing the previously untested EPA Off-Site

Disposal Policy (Procedures for Planning and Implementing Off-Site Response Actions, EPA Memorandum, May 6, 1985). A contract was finally awarded on July 17, 1986, to U.S. Cleanup Contractors for $1.95 million. The contractor identified the off-site disposal facility to be used. It was determined that this facility was in compliance with the Superfund off-site policy.

Remedial Construction Activities

On August 18, 1986, a public meeting was held and a presentation given to the City of Wasteville Toxics Commission on the pending cleanup activities. The Notice to Proceed was issued to the contractor on August 20, 1986. After thorough review, the final work plan was approved November 10, 1986. On-site activities (specifically, background air monitoring and site mobilization) began on October 17, 1986. On November 20, 1986, a well attended on-site press conference was held.

On-site excavation of contaminated soil began in October, 1986, and the first off-site shipment of contaminated soil occurred December 2, 1986. During the on-site stockpiling of material in October and November 1986, the first of many unknown subsurface objects was discovered. These items included concrete foundations and footings, gas cylinders, drums, and sewer lines.

All material discovered was sampled to determine the presence of hazardous materials, except for concrete which was taken directly to the approved hazardous waste landfill due to cost-effectiveness. Any material found to contain lead at greater than 500 ppm or any RCRA priority pollutant at levels higher than de minimus levels, were also removed to the approved hazardous waste landfill. By the end of the project approximately 11,000 tons of contaminated material had been removed, over twice the amount originally estimated in the ROD. Following the removal of all contaminated soil and debris, the site was covered with three feet of clean fill material, regraded to ensure proper drainage and hydroseeded to prevent soil erosion.

Remedial construction was completed in May 1987, and a Pre-Final Inspection was held May 27, 1987 by EPA, USACE, and DRS. Sixty additional days were required for revegetation establishment before the construction contract could be termed completed. On July 26, 1987, USACE conducted the Final Inspection in conjunction with State and EPA representatives and determined that the remedial action had been successfully executed.

On March 30, 1988, USACE submitted a Remedial Action Report signifying successful completion of construction activities. The report documents and discusses the 21 change orders which were

issued throughout the project. Including the change orders and overrun in quantities removed, the total remedial action contract cost was $3,991,315.

Community Relations Activities

Since this site posed a threat to the Wasteville community water supply and was the object of considerable public interest, the Region's community relations staff conducted an active campaign to ensure that the local residents were well informed about the activities at the site. Community relations activities included public meetings, routine publication of progress fact sheets, and a final closeout meeting and site tour upon the completion of site construction activities.

II. DEMONSTRATION OF QA/QC FROM CLEANUP ACTIVITIES

The remedial action contract was carefully reviewed by EPA and USACE for compliance with all EPA and USACE quality assurance/quality control (QA/QC) procedures and protocol. Accordingly, only EPA analytical methods or, where no EPA methods existed, other Federally approved methods were used (such as National Institute of Occupational Safety and Health for analysis of airborne contaminants).

All procedures and protocol followed for soil and air sample analysis during the remedial action are documented in the aforementioned Final Technical Report, Appendix F, Final Summary Chemical QC Report, and in the Contractor Quality Control Summary Report, November 2, 1987.

Ground water sampling and analysis was performed by the EPA Field Investigation Team (FIT) and the EPA Environmental Monitoring Systems Laboratory, respectively. Only EPA procedures and protocol were employed. Comprehensive documentation of the ground water sampling program is contained in the EPA FIT summary reports.

The QA/QC program utilized throughout the remedial action was sufficiently rigorous and was adequately complied with to enable the determination by EPA and USACE that all analytical results reported are accurate to the degree needed to assure satisfactory execution of the remedial action consistent with the ROD.

III. MONITORING RESULTS

The contract for the remedial action (Specifications for Construction Contract, Request for Proposal dated January, 1986 (IFB), Section IJ, Safety, Health and Emergency Response Requirements) detailed a rigorous sampling and analytical program for the remedial action. Specifically, the following sampling program was required and implemented for 1) protection of the off-site public, 2) protection of on-site workers, and 3) confirmation of compliance with remedial action objectives:

- Daily perimeter air monitoring for total particulates, respirable particulates, total lead, and PCB's.
- Daily personnel air sampling of exclusion-zone workers for copper, lead, zinc, and PCB's.
- Random instantaneous on-site and perimeter air sampling for total particulates.
- Confirmatory soil sampling based on a 40 foot by 40 foot grid for copper, lead, zinc, and PCB's.
- Confirmatory soil sample(s) for all EPA priority pollutants at any location where additional contamination was suspected or known to occur.
- Complete EPA priority pollutant soil sampling backfill.
- Confirmatory ground water samples for all EPA priority pollutants.

At any location where lead above 500 ppm or any priority pollutant was detected at a level higher than de minimus, additional soil was excavated and removed to the approved off-site landfill. Overall, contaminated soil was excavated to depths greater than one foot from over 50% of the 2.3 acre site, resulting in the removal of a total of 11,000 cubic yards. Subsequent confirmatory sampling confirmed that this removal quantity was sufficient to ensure that all contamination was removed from the site, and that the cleanup level for lead of 500 ppm specified in the ROD was achieved.

Documentation of the complete results and accuracy of the confirmatory sampling program is contained in the Final Technical Report and Contractor Quality Control Summary Report.

IV. SUMMARY OF OPERATION AND MAINTENANCE

Consistent with the Resource Conversation and Recovery Act of 1976, as amended, 40 CFR Part 264.111, the cleanup of the site was in compliance with "clean closure" requirements. Site O&M activities to be performed include annual inspections of the site to ensure erosion control measures are effective, routine mowing, and maintenance of the perimeter fence. The State, as stated in the SSC, has assumed all responsibility for O&M at this site. No hazardous substances were left on site and therefore the review requirement of Section 121(c) of SARA is not applicable.

V. PROTECTIVENESS

All the completion requirements for this site have been met as specified in OSWER Directive 9320.2-3A. Specifically, confirmatory sampling has verified that the ROD cleanup objective, removal of all lead to below 500 ppm, has been achieved and all cleanup actions specified in the ROD have been implemented. Furthermore, EPA has removed all other contamination detected to de minimus levels. Confirmatory ground water sampling and backfilling the site with clean soil provides further assurance that the site no longer poses any threats to human health or the environment. The only remaining activity to be performed is minor O&M that has been guaranteed by the State. A bibliography of all reports relevant to the completion of this site under the Superfund program is attached. These documents are available by calling the Regional office at (101) 555-1212.

Approved By:

Regional Administrator Date

Disapproved By:

Regional Administrator Date

COMMENTS:

Appendix C

Sample Notice of Intent to Delete

**National Oil and Hazardous
Substances Pollution Contingency Plan
National Priorities List**

AGENCY: Environmental Protection Agency

ACTION: Notice of Intent to Delete Krysowaty Farm site from the National Priorities List: Request for Comments.

SUMMARY: The Environmental Protection Agency (EPA) Region II announces its intent to delete the Krysowaty Farm site from the National Priorities List (NPL) and requests public comment on this action. The NPL constitutes Appendix B to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which EPA promulgated pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended. EPA and the State of New Jersey have determined that all appropriate CERCLA have been implemented and that no further cleanup by responsible parties is appropriate. Moreover, EPA and the State have determined that remedial activities conducted at the site to date have been protective of public health, welfare, and the environment.

DATES: Comments concerning this site may be submitted on or before .

ADDRESSES: Comments may be mailed to:

Stephen D. Luftig, Director
Emergency and Remedial Response Division
U. S. Environmental Protection Agency, Region II
26 Federal Plaza
New York, NY 10278

Comprehensive information on this site is available through the EPA Region II public docket, which is located at EPA's Region II office and is available for viewing by appointment only from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding holidays. Requests for appointments or copies of the background information from the Regional public docket should be directed to the EPA Region II docket office.

The address for the Regional docket office is:

Mr. Richard Wice
U. S. Environmental Protection Agency, Region II
26 Federal Plaza, Room 711
New York, NY 10278
(212) 264-1870

Background information from the Regional public docket is also available for viewing at the Krysowaty Farm site information repository located with:

Mr. Glenn Belnay, Health Officer
Hillsborough Township Health Department
330 Amwell Road
Neshanic, NJ 08853

FOR FURTHER INFORMATION CONTACT:

Mr. Richard Wice
U. S. Environmental Protection Agency, Region II
26 Federal Plaza, Room 711
New York, NY 10278
(212) 264-1870

SUPPLEMENTARY INFORMATION:

Table of Contents:

I. Introduction
II. NPL Deletion Criteria
III. Deletion Procedures
IV. Basis for Intended Site Deletions

I. Introduction

The Environmental Protection Agency (EPA) Region II announces its intent to delete the Krysowaty Farm site, Hillsborough Township, New Jersey, from the National Priorities List (NPL), which constitutes Appendix B of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), and requests comments on this deletion. The EPA identifies sites that appear to present a significant risk to public health, welfare, or the environment and maintains the NPL as the list of those sites. Sites on the NPL may be the subject of remedial actions financed by the Hazardous Substance Superfund Response Trust Fund (Fund). Pursuant to Section 300.66(c)(8) of the NCP, any site deleted from the NPL remains eligible for Fund-financed remedial actions if conditions at the site warrant such action.

The EPA will accept comments concerning this site for thirty days after publication of this notice in the Federal Register.

Section II of this notice explains the criteria for deleting sites from the NPL. Section III discusses procedures that EPA is using for this action. Section IV discusses how the site meets the deletion criteria.

II. NPL Deletion Criteria

The NCP establishes the criteria that the Agency uses to delete sites from the NPL. In accordance with 40 CFR Section 300.66 (c) (7), sites may be deleted from the NPL where no further response is appropriate. In making this determination, EPA will consider whether any of the following criteria have been met:

(i) EPA, in consultation with the State, has determined that responsible or other parties have implemented all appropriate response actions required; or

(ii) All appropriate Fund-financed responses under CERCLA have been implemented and EPA, in consultation with the State, has determined that no further cleanup by responsible parties is appropriate; or

(iii) Based on a remedial investigation, EPA, in consultation with the State, has determined that the release poses no significant threat to public health or the environment and, therefore, taking of remedial measures is not appropriate.

III. Deletion Procedures

In the NPL rulemaking published on October 15, 1984 (49 FR 40320), the Agency solicited and received comments on whether the notice of comment procedures followed for adding sites to the NPL should also be used before sites are deleted. Comments were also received in response to the amendments to the NCP proposed on February 12, 1985 (50 FR 5862). Deletion of sites from the NPL does not itself create, alter, or revoke any individual's rights or obligations. The NPL is designed primarily for informational purposes and to assist Agency management.

EPA Region II will accept and evaluate public comments before making a final decision to delete. The Agency believes that deletion procedures should focus on notice and comment at the local level. Comments from the local community may be the most pertinent to deletion decisions. The following procedures were used for the intended deletion of this state:

1. EPA Region II has recommended deletion and has prepared the relevant documents.

2. The State of New Jersey has concurred with the deletion decision.

3. Concurrent with this National Notice of Intent to Delete, a local notice has been published in local newspapers and has been distributed to appropriate federal, state and local officials, and other interested parties. This local notice announces a thirty (30) day public comment period on the deletion package, which starts two weeks from the date of the notice, , and will conclude on .

4. The Region has made all relevant documents available in the Regional Office and local site information repository.

The comments received during the notice and comment period will be evaluated before the final decision to delete. The Region will prepare a Responsiveness Summary, which will address the comments received during the public comment period.

A deletion will occur after the EPA Regional Administrator places a notice in the Federal Register. The NPL will reflect any deletions in the next final update. Public notices and copies of the Responsiveness Summary will be made available to local residents by Region II.

IV. Basis for Intended Site Deletion

The Krysowaty Farm site is located on a 42-acre tract of land in Hillsborough Township, Somerset County, New Jersey, near the Village of Three Bridges. The site consisted of a waste disposal area approximately one acre in size.

An estimated 500 drums of paint and dye waste sludges, waste oils, and various other waste materials were allegedly dumped, crushed, and buried at the site from 1965 to 1970. Complaints from local resident of health problems and odors in their well water, coupled with an eyewitness account of the alleged waste disposal, brought the site to the attention of the local health department. The New Jersey Department of Environmental Protection (NJDEP) became aware of the site in October 1979. Since 1979, local, state, and federal officials have conducted site investigations and sampling. In 1982, the Township began to provide bottled water to nearby residents. Due to potential ground water contamination the site was proposed for inclusion on the NPL on July 23, 1982 and appeared on the final NPL on December 30, 1982.

In 1984, the EPA completed a remedial investigation and feasibility study (RI/FS). The RI/FS studied the soil, sediment, surface water, a leachate seep, and ground water. Volatile organics, pesticides, base/neutral compounds and trace PCB contamination were found in the waste disposal area. On June 20, 1984, EPA signed a Record of Decision (ROD) selecting a remedy for the Krysowaty Farm site.

The ROD called for the following remedial activities at the site: excavation and removal of the waste disposal area; transport and disposal of wastes to an approved hazardous waste disposal facility; provision of a permanent alternate water supply for potentially affected residences; monitoring of on-site wells, semi-annually, for a five-year period.

The EPA community relations activities at the site included a public meeting in May 1983 to present the work plan for performing the RI/FS, and a meeting in March, 1984, to present findings of the RI/FS and the preferred alternative. Public comments were received and addressed. A major concern of the

public and local officials was the need for an alternate water supply. In July, 1984, EPA held another public meeting to discuss the selected remedial alternative, which included the alternate water supply. EPA conducted a public meeting in November 1985 to present an overview of the remedial actions, focusing on the excavation of wastes.

The remedial actions at the site began in August 1985, and were completed in January, 1986. The Elizabethtown Water Company main was extended to the affected residences and 13,763 cubic yards of contaminated soils and debris were excavated and disposed of off-site in an approved hazardous waste disposal facility. The site was backfilled with clean fill, covered with six inches of top soil, and seeded in the spring of 1986.

The Agency for Toxic Substances and Disease Registry (ATSDR) completed a health assessment for the site in September, 1986. ATSDR reviewed the residual soil data and determined that the concentrations of contaminants measured did not pose an imminent health threat via either ingestion or inhalation pathways. To ensure that the remediated area is left undisturbed, ATSDR recommended institutional controls and ground water monitoring.

The institutional controls for the site include a zoning ordinance by Hillsborough Township, which precludes land development due to the slope of the remediated area, and the mandatory water connection ordinance, which prohibits private well installation and use at the site. Both institutional controls have been implemented. A five year ground water, surface water and soil monitoring program has been implemented by the State of New Jersey to ensure that no future threats to the public health or environment exist. That program commenced in May, 1987.

EPA, with concurrence of the State of New Jersey, has determined that all appropriate Fund-financed responses under CERCLA at the Krysowaty Farm site have been completed, and that no further cleanup by responsible parties is appropriate.

_____
Date

_____
Regional Administrator
USEPA Region II ,

Appendix D

Sample Local Notice of Intent to Delete

ppendix D. Sample Local Notice of Intent to Delete

U.S. ENVIRONMENTAL PROTECTION AGENCY
Requests Comments on the Deletion
of the ABC Site, Wasteville, USA
from the National Priorities List

The U.S. Environmental Protection Agency (EPA) announces its intent to delete the ABC Site from the National Priorities List (NPL), Appendix B of the National Oil and Hazardous Substances Contingency Plan and requests comments on this deletion. The EPA has completed cleanup activities at the site and is proposing that it be taken off the NPL. This deletion does not preclude future actions under Superfund.

The EPA, in conjunction with the state of USA, has determined that all appropriate response measures have been implemented and that no further cleanup action is required. The EPA has determined that the remedy implemented is protective of public health, welfare, and the environment.

The public is invited to comment on the proposed decision to delete this site from the NPL. The public comment period will begin on January 1, 1999 and extend for 30 days. Written comments must be postmarked no later than January 30, 1999, and should be addressed to:

R. P. Manager, Site Project Manager
U.S. Environmental Protection Agency
Regional Office

Oral comments will also be received through this date and should be directed to R. P. Manager at (101) 555-1212.

A local repository has been established to provide detailed information concerning this site at the following address:

Local Town Hall
Main Street
Wasteville, USA

Appendix E
Sample Notice of Deletion

40 CFR Part 300

National Oil and Hazardous Substances Contingency Plan; National Priorities List Update

AGENCY: Environmental Protection Agency

ACTION: Notice of Deletion of a site from the National Priorities List

SUMMARY: The Environmental Protection Agency (EPA) announces the deletion of the ABC Superfund site in Wasteville USA from the National Priorities List (NPL). The NPL is Appendix B of the National Oil and Hazardous Substances Contingency Plan (NCP), which EPA promulgated pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended. EPA and the State of USA have determined that all appropriate Fund-financed responses under CERCLA have been implemented and that no further cleanup by responsible parties is appropriate. Moreover, EPA and the State of USA have determined that remedial actions conducted at the site to date have been protective of public health, welfare, and the environment.

EFFECTIVE DATE:

FOR FURTHER INFORMATION CONTACT:

R. P. Manager, Remedial Project Manager
U.S. Environmental Protection Agency
Regional Office
(101) 555-1212

SUPPLEMENTARY INFORMATION: The site to be deleted from the NPL is:

ABC Site, Wasteville, USA

A Notice of Intent to Delete for this site was published August 12, 1988 (53 CFR 30452). The closing date for comments on the Notice of Intent to Delete was September 12, 1988. EPA received no comments.

The EPA identifies sites which appear to present a significant risk to public health, welfare, or the environment and it maintains the NPL as the list of those sites. Sites on the NPL may be the subject of Hazardous Substance Response Trust Fund (Fund-) financed remedial actions. Any site deleted from the NPL remains eligible for Fund-financed remedial actions in the unlikely event that conditions at the site warrant such action. Section 300.66(c)(8) of the NCP states that Fund-financed actions may be taken at sites deleted from the NPL.

Deletion of a site from the NPL does not affect responsible party liability or impede agency efforts to recover costs associated with response efforts.

List of Subjects in 40 CFR part 300

Hazardous Waste

Part 300--[AMENDED]

1. The authority citation for Part 300 continues to read as follows:

Authority: Section 105, Pub. L. 96-510, 94 Stat. 2764, 42 U.S.C. 9605 and sec. 311(c)(2), Pub. L. 92-500 as amended, 86 Stat. 865, 33 U.S.C. 1321(c)(2); E.O. 12316, 46 FR 42237; E.O. 11735, 38 FR 21243.

Appendix B [AMENDED]

2. The NPL Part 300; Appendix B. is amended as follows

Remove:

ABC Site, Wasteville, USA

_____
Date

_____
Regional Administrator
USEPA Region 1

☆ U.S.G.P.O.: 1989-648-163/87095

United States
Environmental Protection
Agency

Center for Environmental Research
Information
Cincinnati OH 45268

BULK RATE
POSTAGE & FEES PAID
EPA
PERMIT No. G-35

Official Business
Penalty for Private Use, $300

Please make all necessary changes on the above label, detach or copy, and return to the address in the upper left-hand corner.

If you do not wish to receive these reports CHECK HERE ☐; detach, or copy this cover, and return to the address in the upper left-hand corner.

EPA/540/G-89/002